



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,958	07/06/2000	Scott Andrew Snyder	051638-5001-01	6539

9629 7590 09/12/2003

MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

JEANTY, ROMAIN

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/611,958

Applicant(s)

SNYDER, SCOTT ANDREW

Examiner

Romain Jeanty

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address.  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7/6/2000 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 486
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 3623

### DETAILED ACTION

1. This non-final Office action is in response to this Application filed on July 6, 2003.

Claims 1-19 are pending in the application and are presented for examination.

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "whoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

Art Unit: 3623

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "whether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in

Art Unit: 3623

affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, independent claims 1 and 13 are system claims. System claims 1 and 13 clearly recite a “useful, concrete and tangible result” (“recommending to the customer commodity types based upon the business rule implementation”), however the claims recite no structural limitations (i.e., computer implementation), and so it fails the first prong of the test (technological arts).

From this it can be seen that the broadest reasonable equivalent disclosed fails to pass the first prong technological arts test and therefore recites non-statutory subject matter under 35 USC 101.

Claims 2-12 and 14-19 depend on independent claims 1 and 13 are similarly rejected.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 13-15 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sammon, Jr. et al (Herein after referred to Sammon U.S. Patent No. 6,012,051).

Art Unit: 3623

As per claims 1 and 13, Sammon discloses:

asking the customer for a definition of its business (i.e. collecting profile data from the user) (col. 5, lines 1-13)

searching a decision rules database and applying decision rules on the business definition (i.e. processing the user data in a database)(col. 5, lines 42-52);

creating a set of business requirement questions based upon the applied decision rules database and answering the set of business requirement questions buy the customer (col. 5, lines 39-49);

implementing a business rule filter to the answers of the set of business requirement question (See abstract and col. 1, lines 60-64); and

recommending to the customer commodity types “product” based upon the business rule implementation (i.e. presenting a list of product “commodity” to the consumer)(col. 4, lines 5-14).

As per claims 2 and 14, Sammon further discloses:

selecting by the customer, at least one of the recommended commodity types (col. 12, lines 37-56); and

entering at least one of the recommended commodity types selected by the customer into an optimizer device for determining an optimum commodity selection for each of the selected recommended commodity types for use by the customer (col. 5, lines 53-59).

As per claims 3 and 15, Sammon further discloses wherein the step of asking includes asking a specific type of business the customer has to determine a business rule set to be applied (col. 3, lines 3-5).

Art Unit: 3623

As per claim 4, Sammon further teaches the use of fuzzy logic (col. 13, lines 34-39).

As per claim 19, Sammon discloses optimizing the recommended product (col. 6, lines 36-55).

5. Claims 8-11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable by Ferstenberg et al (U.S. Patent No. 5,873,071).

As per claims 8 and 11, Ferstenberg et al discloses:

An optimizer device that is connected to a network (col. 15, lines 62 through col. 16 line 20); and

A customer device for connecting to the optimizer device via the network and sending preferences of the customer to the optimizer device (col. 15 line 62 through col. 16 line 20); and

At least one commodity (col. 7 lines 16-18; col. 11 lines 5-8; col. 44 lines 38-46); and  
at least one utility function (col. 47 lines 18-43), through the functionality of The database components of the OM system participate essentially in providing a fault-tolerant system by storing copies of all input and output messages and records reflecting the up-to-the-moment state of all OM system processes, and

a processing component for presenting to the customer a list of commodities containing at least one commodity based on the preferences and the utility function (col. 14 lines 9-44).

As per claim 9, Ferstenberg et al further discloses wherein the optimizer device includes a web server component for hosting a web site and the customer uses the customer device to visit the web site (Fig. 4 [47, 49]; col. 3 line 51 through col. 4 line 3 and col. 16 lines 21-50).

As per claim 10, Ferstenberg et al further discloses wherein the utility function is associated with a parameter of the commodity type and is evaluated to obtain the at least one



Art Unit: 3623

value, wherein the value represents a cost or benefit of the parameter to the customer (col. 24 line 23 through col. 30 line 6).

As per claim 18, Ferstenberg et al further teaches:

identifying at least one first parameter associated with a commodity (col. 14, lines 45-67);

associating at least one value to the at least one first parameter (col. 14 lines 45-67);

calculating an estimated cost of the commodity based on features of the commodity that are desired by the customer (col. 14, line 45 through col. 15 line 22);

obtaining from the customer a preference weighting on at least one second parameter (Table 2; col. 19 lines 3-32 and col. 24, lines 9-40);

calculating an effective cost by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters (Table 2; col. 19 lines 3-32 and col. 24, lines 9-40);

presenting a list of commodities to the customer containing at least the commodity with the lowest effective cost (col. 19 lines 3-32; col. 24 lines 9 through col. 25 line 5).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Sammon, Jr. et al (Herein after referred to Sammon U.S. Patent No. 6,012,051)

As per claims 5 and 16, while Sammon teaches asking the consumer questions regarding the consumer profile data and requirement, Sammon fails to explicitly disclose asking questions regarding employees, expected growth rate, whether and how many computers are needed, what type of computer processing is needed, how many telephones and what type of telephone services are needed, if the business has an existing network and what type of network, if the customer has an existing Internet connection and what type of connection, the customer's existing building plans, and what type of network security exists and is needed for the future. However, these are normal types of information one would need to collect in order to set up a computer network for a customer/client. It would have been obvious to a person of ordinary skill in the art at the time the invention was made that one would collect these types of information with the motivation of providing satisfying services to the customer.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Sammon, Jr. et al (Herein after referred to Ferstenberg et al U.S. Patent No. 5,873,071).

As per claim 12, while Ferstenberg et al asking the consumer questions regarding the consumer profile data and requirement, Ferstenberg et al fails to explicitly disclose explicitly asking questions regarding employees, expected growth rate, whether and how many computers are needed, what type of computer processing is needed, how many telephones and what type of telephone services are needed, if the business has an existing network and what type of network, if the customer has an existing Internet connection and what type of connection, the customer's

Art Unit: 3623

existing building plans, and what type of network security exists and is needed for the future.

However, these are normal types of information one would need to collect in order to set up a computer network for a customer/client. It would have been obvious to a person of ordinary skill in the art at the time the invention was made that one would collect these types of information with the motivation of providing satisfying services to the customer.

9. Claim 6-7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Sammon, Jr. et al (Herein after referred to Sammon U.S. Patent No. 6,012,051) in view of Ferstenberg et al (U.S. Patent No. 5,873,071).

As per claims 6 and 17, Sammon teaches the idea of optimizing (col. 6, lines 50-55), but fails to teach allowing the customer to de-select at least one of the recommending commodity types and allowing the customer to request non-recommended commodity types and entering the at least one of the recommended and entering the recommended commodity types and the requested non-recommended commodity types into an optimizer device for determining optimum commodity selections for each of the recommended and requested non-recommended commodity types for use by the customer. Ferstenberg et al, on the other hand discloses a computer method for intermediated exchange of commodities which allow a participant to select and de-select recommended and non-recommended commodities by the participant (col. 15 line 62 through col. 16 line 20). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to have modified the disclosure of Sammon to include the teachings of Ferstenberg. One having ordinary skill in the art would have been motivated to use such a modification in order to facilitate a selection of commodities according to the customer's goals.

As per claim 7, Sammon fails to teach the following limitations but Ferstenberg teaches:

identifying at least one first parameter associated with a commodity (col. 14, lines 45-67);

associating at least one value to the at least one first parameter (col. 14 lines 45-67);

calculating an estimated cost of the commodity based on features of the commodity that are desired by the customer (col. 14, line 45 through col. 15 line 22);

obtaining from the customer a preference weighting on at least one second parameter (Table 2; col. 19 lines 3-32 and col. 24, lines 9-40);

calculating an effective cost by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters (Table 2; col. 19 lines 3-32 and col. 24, lines 9-40);

presenting a list of commodities to the customer containing at least the commodity with the lowest effective cost (col. 19 lines 3-32; col. 24 lines 9 through col. 25 line 5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the disclosures of Sammon by including the teachings of Ferstenberg. A person having ordinary skill would have been motivated to use such a modification in order to facilitate a selection of commodities according to the customer's goals.

### **Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Romain Jeanty whose telephone number is (703) 308-9585. The examiner can normally be reached Monday-Thursday from 7:30 am to 6:00 pm. If attempts to

Art Unit: 3623

reach the examiner are not successful, the examiner's supervisor, Tariq R Hafiz can be reached at (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:


Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to: (703) 305-7687

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive,  
Arlington VA, Seventh floor receptionist.



Romain Jeanty

Art Unit 3623

September 8, 2003